

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

Listing of Claims:

1. (Previously Presented) A semiconductor device comprising:
 - a semiconductor element having a plurality of electrodes;
 - a redistribution layer having a plurality of electrode pads and electrical conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads;
 - a plurality of metal posts each with a first shape and a first size formed on the electrode pads of the redistribution layer,
 - external connection electrodes contacting the respective metal posts; and
 - at least one mark member with a second shape and a second size which serves as an alignment mark located in a predetermined positional relationship with the metal posts,
 - wherein the mark member is made of the same material as the metal posts;
 - wherein the first shape and the first size are correspondingly different from the second shape and the second size; and
 - wherein the metal posts have a flat top surface.
2. (Previously Presented) The semiconductor device as claimed in claim 1, wherein the alignment mark has an outer configuration other than a circle.

3. (Previously Presented) The semiconductor device as claimed in claim 1, wherein a width of the alignment mark measured along a plane parallel to a surface of the redistribution layer is greater than a height of the metal posts.

4.-12. (Cancelled)

13. (Previously Presented) An apparatus for fixing a semiconductor wafer by suction, comprising:

a vacuum chuck table having a porous plate overlaying a plurality of concentric suction grooves;

a plurality of suction passages each being correspondingly connected to the plurality of concentric suction grooves;

each of the plurality of suction passages being connected to more than one hole on the porous plate; and

a suctioning device for sequentially introducing a suctioning force into the suction passages at different timing.

14. (Previously Presented) A semiconductor device comprising:

a semiconductor element having a plurality of electrodes;

a redistribution layer having a plurality of electrode pads and electrical conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads;

a plurality of metal posts with a first shape and a first size formed on the electrode pads of the redistribution layer;

external connection electrodes contacting the respective metal posts; and

at least one mark member with a second shape and a second size which serves as an alignment mark located in a predetermined positional relationship with the metal posts;

wherein the first shape and the first size are correspondingly different from the second shape and the second size;

wherein the metal posts have a flat top surface.

15. (Previously Presented) A semiconductor device comprising:

a semiconductor element having a plurality of electrodes;

a redistribution layer having a plurality of electrode pads and electrical conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads;

a plurality of metal posts formed on the electrode pads of the redistribution layer;

a protruding electrode attached to a top of one of the metal posts, the protruding electrode and the metal post forming an electrode part; and

at least one mark member which serves as an alignment mark located in a predetermined positional relationship with the electrode part, the mark member comprising one of the metal posts but lacking the protruding electrode;

wherein the metal posts have a flat top surface.

16. (Previously Presented) A semiconductor device comprising:

a semiconductor element having a plurality of electrodes;

a redistribution layer having a plurality of electrode pads and electrical conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads;

a plurality of metal posts each with a first shape and a first size formed on the electrode pads of the redistribution layer, the metal posts being configured to be provided with external connection electrodes; and

at least one mark member with a second shape and a second size which serves as an alignment mark located in a predetermined positional relationship with the metal posts,

wherein the mark member is made of the same material as the metal posts; and

wherein the first shape and the first size are correspondingly different from the second shape and the second size;

wherein the metal posts have a flat top surface, and

wherein a width of the alignment mark measured along a plane parallel to a surface of the redistribution layer is greater than a height of the metal posts.

17. (Previously Presented) A semiconductor device comprising:

a semiconductor element having a plurality of electrodes;

a redistribution layer having a plurality of electrode pads and electrical conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads;

a plurality of metal posts with a first shape and a first size formed on the electrode pads of the redistribution layer, the metal posts being configured to be provided with external connection electrodes; and

at least one mark member with a second shape and a second size which serves as an alignment mark located in a predetermined positional relationship with the metal posts;

wherein the first shape and the first size are correspondingly different from the second shape and the second size;

wherein the metal posts have a flat top surface, and

wherein a width of the alignment mark measured along a plane parallel to a surface of the redistribution layer is greater than a height of the metal posts.

18. (Previously Presented) A semiconductor device comprising:

a semiconductor element having a plurality of electrodes;

a redistribution layer having a plurality of electrode pads and electrical conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads;

a plurality of metal posts formed on the electrode pads of the redistribution layer;

at least one electrode part comprising one of the metal posts and a protruding electrode attached to a top of the one of the metal posts; and

at least one mark member which serves as an alignment mark located in a predetermined positional relationship with the electrode part, the mark member comprising one of the metal posts but lacking the protruding electrode;

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wherein the metal posts have a flat top surface, and

wherein a width of the alignment mark measured along a plane parallel to a surface of the redistribution layer is greater than a height of the metal posts.

19. (Cancelled)